

## **ABSTRACT**

A pair of first speed gears (26a, 26b) is provided between a first input shaft (14) and a first output shaft (20), and a pair of fourth speed gears (30a, 30b) is provided between a second input shaft (18) and the first output shaft. A pair of third speed gears (34a, 34b) and a pair of fifth speed gears (36a, 36b) are provided between the first input shaft and a second output shaft (22), and a pair of second speed gears (40a, 40b) and a pair of sixth speed gears (30a, 42b) are provided between the second input shaft and the second output shaft. A backward input gear (34a) integrated with the first input shaft and a backward output gear (46b) provided on the first output shaft are connected to each other via idler gears (46a, 46b) disposed on a sub shaft (24). By this arrangement the length in an axial direction of the transmission is made short.